

BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF WORK: Improvements to roads and drains at Kenchenahalli colony main and cross roads and surrounding areas in Ward No. 02

PRE MEASUREMENT SHEET

FIRST AND FINAL BILL

FIRST AND FINAL BILL									
Chainage in m		Description of Item	Unit	No	Length	Breadth	Depth	Quantity	Remarks
From	To				(m)	(m)	(m)		
Item No. 01		Excavation for road, drains and similar works KSRRB 300-1. Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications, and as per the directions of the Engineer-in-charge of the work .							
Measurements Taken On :		11-11-2019							
		New Drain							
		1st cross(RHS frm main rd)							
0	13.9		Cum	1	13.90	1.20	1.00	16.68	
20.5	35	13.9-20.5 No Drain	Cum	1	14.50	1.20	1.00	17.40	
35	50		Cum	1	15.00	1.20	1.00	18.00	
50	65		Cum	1	15.00	1.20	1.00	18.00	
65	80		Cum	1	15.00	1.20	1.00	18.00	
80	95		Cum	1	15.00	1.20	1.00	18.00	
95	110		Cum	1	15.00	1.20	1.00	18.00	
110	125		Cum	1	15.00	1.20	1.00	18.00	
125	140		Cum	1	15.00	1.20	1.00	18.00	
140	157.6		Cum	1	17.60	1.20	1.00	21.12	
		2nd cross(LHS opp to main rd)							
0	15		Cum	1	15.00	1.10	1.00	16.50	
15	30		Cum	1	15.00	1.10	1.00	16.50	
30	36.4		Cum	1	6.40	1.10	1.00	7.04	
36.4	43.6		Cum	1	7.20	1.10	1.00	7.92	
43.6	60		Cum	1	16.40	1.10	1.00	18.04	
60	75		Cum	1	15.00	1.10	1.00	16.50	
75	90		Cum	1	15.00	1.10	1.00	16.50	
90	105		Cum	1	15.00	1.10	0.90	14.85	
105	121		Cum	1	16.00	1.10	0.90	15.84	
121	131		Cum	1	10.00	1.10	0.90	9.90	
131	145		Cum	1	14.00	1.10	0.90	13.86	
145	160		Cum	1	15.00	1.10	0.90	14.85	
160	174.5		Cum	1	14.50	1.10	0.90	14.36	
		2nd Cross RHS							
0	15		Cum	1	15.00	1.10	0.90	14.85	

Contactor



Assistant Engineer 11/11/19

Assistant Executive Engineer 11/11/19

BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF WORK: Improvements to roads and drains at Kenchenahalli colony main and cross roads and surrounding areas in Ward No. 02

PRE MEASUREMENT SHEET FIRST AND FINAL BILL

Chainage in m		Description of Item	Unit	No	Length (m)	Breadth (m)	Depth (m)	Quantity	Remarks
From	To								
15	30		Cum	1	15.00	1.10	0.90	14.85	
30	45		Cum	1	15.00	1.10	0.90	14.85	
45	60		Cum	1	15.00	1.10	0.90	14.85	
60	79.2		Cum	1	19.20	1.10	0.90	19.01	
		3rd Main RHS SAMUDHAYA BHAVAN							
0	15		Cum	1	15.00	1.10	0.90	14.85	
15	30		Cum	1	15.00	1.10	0.90	14.85	
30	45		Cum	1	15.00	1.10	0.90	14.85	
45	60		Cum	1	15.00	1.10	0.90	14.85	
60	68.7		Cum	1	8.70	1.10	0.90	8.61	
		Arun Patios(LHS)							
0	15		Cum	1	15.00	1.20	1.00	18.00	
15	30		Cum	1	15.00	1.20	1.00	18.00	
30	45		Cum	1	15.00	1.20	1.00	18.00	
45	60		Cum	1	15.00	1.20	1.00	18.00	
60	75		Cum	1	15.00	1.20	1.00	18.00	
75	91.2		Cum	1	16.20	1.20	1.00	19.44	
101	115		Cum	1	14.00	1.20	1.00	16.80	
115	130		Cum	1	15.00	1.20	1.00	18.00	
130	147		Cum	1	17.00	1.20	1.00	20.40	
157.2	170		Cum	1	12.80	1.20	1.00	15.36	
170	185		Cum	1	15.00	1.20	1.00	18.00	
185	200		Cum	1	15.00	1.20	1.00	18.00	
200	207.9		Cum	1	7.90	1.20	1.00	9.48	
218.4	244.7		Cum	1	26.30	1.20	1.00	31.56	
252.7	279		Cum	1	26.30	1.20	1.00	31.56	
		School LHS							
0	15		Cum	1	15.00	1.10	0.80	13.20	
15	30		Cum	1	15.00	1.10	0.80	13.20	
30	37.7		Cum	1	7.70	1.10	0.80	6.78	
		Sadiq house							
0	14.3		Cum	1	14.30	1.10	0.80	12.58	
14.3	50		Cum	1	35.70	1.10	0.80	31.42	
50	83		Cum	1	33.00	1.10	0.80	29.04	
		1st Right Cross After Railway Gate							
0	15		Cum	1	15.00	0.90	0.80	10.80	C & P

Contactor



Assistant Engineer

Assistant Executive Engineer

BANGALORE MAHANAGARA PALIKE

NAME OF WORK: Improvements to roads and drains at Kenchenahalli colony main and cross roads and surrounding areas in Ward No. 02

PRE MEASUREMENT SHEET FIRST AND FINAL BILL

Chainage in m		Description of Item	Unit	No	Length	Breadth	Depth	Quantity	Remarks
From	To								
15	30		Cum	1	15.00	0.90	0.80	10.80	
30	45		Cum	1	15.00	0.90	0.80	10.80	
45	60		Cum	1	15.00	0.90	0.80	10.80	
60	75		Cum	1	15.00	0.90	0.80	10.80	
75	90		Cum	1	15.00	0.90	0.80	10.80	
90	108		Cum	1	15.00	0.90	0.80	10.80	
		4th Main Road	Cum	1	18.00	0.90	0.80	12.96	
0	9		Cum	1	9.00	0.90	1.00	8.10	
9	20.5		Cum	1	11.50	0.90	1.00	10.35	
20.5	24		Cum	1	3.50	0.90	1.00	3.15	
24	27.1		Cum	1	3.10	0.90	1.00	2.79	
27.1	45		Cum	1	17.90	0.90	1.00	16.11	
45	63		Cum	1	18.00	0.90	1.00	16.20	
63	75		Cum	1	12.00	0.90	1.00	10.80	
75	95		Cum	1	20.00	0.90	1.00	18.00	
		RHS							
0	9		Cum	1	9.00	0.90	1.00	8.10	
9	20.5		Cum	1	11.50	0.90	1.00	10.35	
20.5	24		Cum	1	3.50	0.90	1.00	3.15	
24	27.1		Cum	1	3.10	0.90	1.00	2.79	
27.1	45		Cum	1	17.90	0.90	1.00	16.11	
45	63		Cum	1	18.00	0.90	1.00	16.20	
		2nd Main ~~Puttenhalli~~ Kenchenahalli							
33	39.6		Cum	1	6.60	1.20	1.00	7.92	
39.6	44.1		Cum	1	4.50	1.20	1.00	5.40	
44.1	66.6		Cum	1	22.50	1.20	1.00	27.00	
66.6	94.7		Cum	1	28.10	1.20	1.00	33.72	
94.7	105		Cum	1	10.30	1.20	1.00	12.36	
		2nd Main ~~Puttenhalli~~ Kenchenahalli							
33	39.6		Cum	1	6.60	1.20	1.00	7.92	
39.6	44.1		Cum	1	4.50	1.20	1.00	5.40	
44.1	66.6		Cum	1	22.50	1.20	1.00	27.00	
66.6	94.7		Cum	1	28.10	1.20	1.00	33.72	
94.7	105		Cum	1	10.30	1.20	1.00	12.36	
		Culvert							
		Arun Patios(LHS)	Cum	1	9.90	1.50	1.00	14.85	
			Cum	1	9.80	1.50	1.00	14.70	
		Over Burden	Cum	1	7.00	0.80	0.60	3.36	
TOTAL								1330.76	

Contactor



Assistant Engineer

Assistant Executive Engineer

NAME OF WORK: Improvements to roads and drains at Kenchenahalli colony main and cross roads and surrounding areas in Ward No. 02

BANGALORE MAHANAGARA PALIKE

PRE MEASUREMENT SHEET
FIRST AND FINAL BILL

FIRST AND FINAL BILL									
Chainage in m		Description of Item	Unit	No	Length	Breadth	Depth	Quantity	Remarks
From	To				(m)	(m)	(m)		
Item no.02		Providing and laying Plain cement concrete of mix 1:3:6 with OPC @ 220kgs, with crushed 40mm and down size graded granite metal coarse aggregates @0.89cum and fine aggregates @ 0.46cum, in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days including cost of all materials, labour, HOM curing, form works, scaffolding and centering complete as per specifications. and as per the directions of the Engineer-in-charge of the work .							
Measurements Taken On :		14-11-2019							
		New Drain							
		1st cross(RHS frm main rd)							
0	13.9		Cum	1	13.90	1.20	0.15	2.50	
20.5	35		Cum	1	14.50	1.20	0.15	2.61	
35	50		Cum	1	15.00	1.20	0.15	2.70	
50	65		Cum	1	15.00	1.20	0.15	2.70	
65	80		Cum	1	15.00	1.20	0.15	2.70	
80	95		Cum	1	15.00	1.20	0.15	2.70	
95	110		Cum	1	15.00	1.20	0.15	2.70	
110	125		Cum	1	15.00	1.20	0.15	2.70	
125	140		Cum	1	15.00	1.20	0.15	2.70	
140	157.6		Cum	1	17.60	1.20	0.15	3.17	
		2nd cross(LHS opp to main rd)							
0	15		Cum	1	15.00	1.10	0.15	2.48	
15	30		Cum	1	15.00	1.10	0.15	2.48	
30	36.4		Cum	1	6.40	1.10	0.15	1.06	
36.4	43.6		Cum	1	7.20	1.10	0.15	1.19	
43.6	60		Cum	1	16.40	1.10	0.15	2.71	
60	75		Cum	1	15.00	1.10	0.15	2.48	
75	90		Cum	1	15.00	1.10	0.15	2.48	
90	105		Cum	1	15.00	1.10	0.15	2.48	
105	121		Cum	1	16.00	1.10	0.15	2.64	
121	131		Cum	1	10.00	1.10	0.15	1.65	
131	145		Cum	1	14.00	1.10	0.15	2.31	
145	160		Cum	1	15.00	1.10	0.15	2.48	
160	174.5		Cum	1	14.50	1.10	0.15	2.39	
		Arun Patios(LHS)							
0	15		Cum	1	15.00	1.20	0.15	2.70	

Contactor



Assistant Engineer

14/11/2019

Assistant Executive Engineer

14/11/19

BRUHAT BANGALORE MAHANAGARA PALIKE

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PRE MEASUREMENT SHEET FIRST AND FINAL BILL

Chainage in m		Description of Item	Unit	No	Length (m)	Breadth (m)	Depth (m)	Quantity	Remarks
From	To								
15	30		Cum	1	15.00	1.20	0.15	2.70	
30	45		Cum	1	15.00	1.20	0.15	2.70	
45	60		Cum	1	15.00	1.20	0.15	2.70	
60	75		Cum	1	15.00	1.20	0.15	2.70	
75	91.2		Cum	1	16.20	1.20	0.15	2.92	
101	115		Cum	1	14.00	1.20	0.15	2.52	
115	130		Cum	1	15.00	1.20	0.15	2.70	
130	147		Cum	1	17.00	1.20	0.15	3.06	
157.2	170		Cum	1	12.80	1.20	0.15	2.30	
170	185		Cum	1	15.00	1.20	0.15	2.70	
185	200		Cum	1	15.00	1.20	0.15	2.70	
200	207.9		Cum	1	7.90	1.20	0.15	1.42	
218.4	244.7		Cum	1	26.30	1.20	0.15	4.73	
252.7	279		Cum	1	26.30	1.20	0.15	4.73	
		2nd Cross RHS							
0	15		Cum	1	15.00	1.10	0.15	2.48	
15	30		Cum	1	15.00	1.10	0.15	2.48	
30	45		Cum	1	15.00	1.10	0.15	2.48	
45	60		Cum	1	15.00	1.10	0.15	2.48	
60	79.2		Cum	1	19.20	1.10	0.15	3.17	
		3rd Main RHS SAMUDHAYA BHAVAN							
0	15		Cum	1	15.00	1.10	0.15	2.48	
15	30		Cum	1	15.00	1.10	0.15	2.48	
30	45		Cum	1	15.00	1.10	0.15	2.48	
45	60		Cum	1	15.00	1.10	0.15	2.48	
60	68.7		Cum	1	8.70	1.10	0.15	1.44	
		School LHS							
0	15		Cum	1	15.00	1.10	0.15	2.48	
15	30		Cum	1	15.00	1.10	0.15	2.48	
30	37.7		Cum	1	7.70	1.10	0.15	1.27	
		Sadiq house							
0	14.3		Cum	1	14.30	1.10	0.15	2.36	
14.3	50		Cum	1	35.70	1.10	0.15	5.89	
50	83		Cum	1	33.00	1.10	0.15	5.45	
		1st Right Cross After Railway Gate							
0	15		Cum	1	15.00	0.90	0.15	2.03	

Contactor



Assistant Engineer

Assistant Executive Engineer

BROTHAT BANGALORE MAHANAGARA PALIKE

NAME OF WORK: Improvements to roads and drains at Kenchenahalli colony main and cross roads and surrounding areas in Ward No. 02

PRE MEASUREMENT SHEET FIRST AND FINAL BILL

Chainage in m		Description of Item	Unit	No	Length (m)	Breadth (m)	Depth (m)	Quantity	Remarks
From	To								
15	30		Cum	1	15.00	0.90	0.15	2.03	
30	45		Cum	1	15.00	0.90	0.15	2.03	
45	60		Cum	1	15.00	0.90	0.15	2.03	
60	75		Cum	1	15.00	0.90	0.15	2.03	
75	90		Cum	1	15.00	0.90	0.15	2.03	
90	108		Cum	1	18.00	0.90	0.15	2.43	
		4th Main Road							
		LHS							
0	9		Cum	1	9.00	0.90	0.15	1.22	
9	20.5		Cum	1	11.50	0.90	0.15	1.55	
20.5	24		Cum	1	3.50	0.90	0.15	0.47	
24	27.1		Cum	1	3.10	0.90	0.15	0.42	
27.1	45		Cum	1	17.90	0.90	0.15	2.42	
45	63		Cum	1	18.00	0.90	0.15	2.43	
63	75		Cum	1	12.00	0.90	0.15	1.62	
75	95		Cum	1	20.00	0.90	0.15	2.70	
		RHS							
0	9		Cum	1	9.00	0.90	0.15	1.22	
9	20.5		Cum	1	11.50	0.90	0.15	1.55	
20.5	24		Cum	1	3.50	0.90	0.15	0.47	
24	27.1		Cum	1	3.10	0.90	0.15	0.42	
27.1	45		Cum	1	17.90	0.90	0.15	2.42	
45	63		Cum	1	18.00	0.90	0.15	2.43	
		2nd Main Road							
33	39.6		Cum	1	6.60	1.20	0.15	1.19	
39.6	44.1		Cum	1	4.50	1.20	0.15	0.81	
44.1	66.6		Cum	1	22.50	1.20	0.15	4.05	
66.6	94.7		Cum	1	28.10	1.20	0.15	5.06	
94.7	105		Cum	1	10.30	1.20	0.15	1.85	
		Culvert							
		Arun Patios(LHS)	Cum	1	9.90	1.50	0.15	2.23	
			Cum	1	9.80	1.50	0.15	2.21	
TOTAL								196.88	

Contactor



Assistant Engineer

14/11/19

Assistant Executive Engineer

14/11/19

BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF WORK: Improvements to roads and drains at Kenchenahalli colony main and cross roads and surrounding areas in Ward No. 02

PRE MEASUREMENT SHEET FIRST AND FINAL BILL

FIRST AND FINAL BILL									
Chainage in m		Description of Item	Unit	No	Length	Breadth	Depth	Quantity	Remarks
From	To				(m)	(m)	(m)		
Item no.04		Providing TMT steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications.							
Measurements Taken On :		15/11/19							
		for Drain 60 kg	Tonne	From calculation sheet				25.09	
		for Culvert 100kg	Tonne	From calculation sheet				2.26	
TOTAL								27.35	

Contactor



Assistant Engineer 15/11/19

Assistant Executive Engineer 15/11/19

URAHAT BANGALORE MAHANAGARA PALIKE

NAME OF WORK: Improvements to roads and drains at Kenchenahalli colony main and cross roads and surrounding areas in Ward No. 02

**PRE MEASUREMENT SHEET
FIRST AND FINAL BILL
STEEL CALCULATION**

SI NO	Description	Nos	BAR DIA mm	No. Bars	Total No. bars	Length m	Total Length m	Weight kg/m	Total weight Kg's
Item no.04	Providing TMT steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, piling in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications.								
Measurements Taken On :									
	Kenchenahalli								
	1st cross(RHS frm main rd)								
	Main Bars (#12@120 c/c)	1	12	1259	1259	2.70	3400.20	0.887814	3018.75
	Distribution(9-#8)	1	8	9	9	151.00	1359.00	0.394584	536.24
	2nd cross(LHS opp to main rd)								
	Main Bars (#12@150 c/c)	1	12	1455	1455	2.60	3783.43	0.887814	3358.99
	Distribution(9-#8)	1	8	9	9	174.50	1570.50	0.394584	619.69
	Arun Patios(LHS)								
	RHS								
	Main Bars (#12@140 c/c)	1	12	1719	1719	2.70	4640.91	0.887814	4120.27
	Distribution(9-#8)	1	8	9	9	240.50	2164.50	0.394584	854.08
	2nd Cross RHS								
	Main Bars (#12@140 c/c)	1	12	567	567	2.50	1416.79	0.887814	1257.84
	Distribution(9-#8)	1	8	9	9	79.20	712.80	0.394584	281.26
	3rd Main RHS SAMUDHAYA BHAVAN								
	Main Bars (#12@140 c/c)	1	12	492	492	2.45	1204.70	0.887814	1069.55
	Distribution(9-#8)	1	8	9	9	68.70	618.30	0.394584	243.97
	School LHS								
	Main Bars (#12@140 c/c)	1	12	270	270	2.40	648.69	0.887814	575.91
	Distribution(9-#8)	1	8	9	9	37.70	339.30	0.394584	133.88
	Sadiq house								
	Main Bars (#12@120 c/c)	1	12	693	693	2.30	1593.13	0.887814	1414.41



Contractor

Assistant Engineer

Assistant Executive Engineer

NAME OF WORK: Improvements to roads and drains at Kenchenahalli colony main and cross roads and surrounding areas in Ward No. 02

BRUHAT BANGALORE MAHANAGARA PALIKE

PRE MEASUREMENT SHEET

FIRST AND FINAL BILL

STEEL CALCULATION

SI NO	Description	Nos	BAR DIA	No. Bars	Total No. bars	Length	Total Length	Weight	Total weight
			mm			m	m	kg/m	Kg's
	Distribution(9-#8)	1	8	9	9	83.00	747.00	0.394584	294.75
	1st Right Cross After Railway Gate								
	Main Bars (#12@120 c/c)	1	12	901	901	2.50	2252.50	0.887814	1999.80
	Distribution(9-#8)	1	8	9	9	108.00	972.00	0.394584	383.54
	4th Main Road								
	LHS								
	Main Bars (#12@120 c/c)	1	12	793	793	2.50	1981.67	0.887814	1759.35
	Distribution(9-#8)	1	8	9	9	95.00	855.00	0.394584	337.37
	RHS								
	Main Bars (#12@120 c/c)	1	12	526	526	2.30	1209.80	0.887814	1074.08
	Distribution(9-#8)	1	8	9	9	63.00	567.00	0.394584	223.73
	2nd Main Pattanahalli Kenchenahalli								
	Main Bars (#12@120 c/c)	1	12	601	601	2.40	1442.40	0.887814	1280.58
	Distribution(9-#8)	1	8	9	9	72.00	648.00	0.394584	255.69
	Culvert								
	Arun Patios(LHS) side wall								
	Main Bars outer face (#16@150 c/c)	2	16	67	134	2.80	375.20	1.578336	592.19
	Main Bars inner face (#16@180 c/c)	2	16	67	134	2.40	321.60	1.578336	507.50
	Distribution	4	10	10	40	0.80	32.00	0.616538	19.73
	side walls(9#10)	2	10	10	20	1.20	24.00	0.616538	14.80
	bottom slab(9-#10)								
	Arun Patios(LHS) side wall								
	Main Bars outer face (#16@150 c/c)	2	16	66	133	2.80	371.47	1.578336	586.30
	Main Bars inner face (#16@150 c/c)	2	16	66	133	2.40	318.40	1.578336	502.54
	Distribution	4	10	10	40	0.80	32.00	0.616538	19.73
	side walls(9#10)	2	10	10	20	1.20	24.00	0.616538	14.80
	bottom slab(9-#10)								
TOTAL QTY IN KG'S									27351.41
TOTAL QTY IN TONNE									27.35

Contractor



Assistant Engineer

Assistant Executive Engineer